

## Introduction

Thank you for selecting Disco II. Disco II is a four-channel DMX laser which can be controlled via a standard DMX controller. It is a lightweight, mini intelligent fixture and is an ideal product for discos, small clubs, exhibitions and any place that need visionary effect. Disco-II provides 50 preset patterns and three operating modes. For safe operation, read this manual before powering or installing the fixture, follow the safety precautions listed below, and observe all warnings printed in this manual and on the fixture.

## Safety Precautions

- Do not spill liquids in to or on to your unit. If this ever happens, disconnect the main power immediately. Do not connect this unit to any dimmer pack.
- Always disconnect from main power before making any type of connection.
- Be sure to locate this unit in a place with adequate ventilation at least 15 cm from a wall, and mount this unit in safe and stable matter.
- To prevent fire or shock hazard, do not expose this unit to a high temperature or high humidity area. Please unplug unit when not in use.
- Always keep combustible materials away from the fixture.
- This unit is intended for indoor use. Use of this unit outdoors voids all warranties.
- Always refer service to a qualified technician. Never look directly into laser beam.
- Occasional breaks are necessary to prevent breakdowns.
- **Caution - Use of controls or adjustments or performance of procedures other than as specified herein may result in hazardous radiation exposure!**

## Set Up

**Unpacking** Disco II comes with: 1 hanging bracket, 2 clamp levers, 2 washers, 1 adapter and 1 user guide. Unpack carefully and be sure that no damage has occurred during shipping. If there is anything missing or appear to be damaged please contact your dealer.

**Power Connection** Be sure the source voltage in your area matches the required voltage for your Disco II before plugging your unit in. Incorrect voltage selection will detrimentally affect the operation of this product.

**DMX Cable Connection** Disco II is a four-channel DMX fixture that can be operated with universal DMX controller. This unit and DMX controller require a standard 3-pin XLR connector for data input and data output.

**Installation/Mounting** Disco II should be properly mounted by using a suitable hanging clamp and safety cable. Use in a well-ventilated area. Be sure no ventilation slots are blocked.

## Cleaning

Use a soft cloth and normal glass cleaner to clean the outside casing and the hexagonal reflection mirror. Cleaning frequency depends on the environment in which the fixture operates. Be sure to dry all parts before plugging the unit back in.

## Specifications



















Product Name	Disco II				
Model No.	AL16-5R/ 30R/ 50R/ 100R/ 200R			AL16-05G/ 20G/ 30G	
Laser Diode	4.9/ 30/ 50/ 100/ 200mW			4.9/ 20/ 30mW	
Laser Color	Red			Green	
Model No.	5R5G	20R10G	50R20G	100R30G	200R50G
Laser Diode	4.9mW x 2	20mW + 10mW	50mW + 20mW	100mW + 30mW	200mW + 50mW
Laser Color	Red, Green and Yellow				
Net Weight	4.5Kgs				
Power	UL Adapter (Input 120V 60Hz & Output DC 12V) or CE Adapter (Input 220-240V 50Hz & Output DC 12V)				
Classification	4.9~20mW: 3R/ 30~200mW: 3B				
Size (mm)	L300 x W290 x H307				
Housing	Metal				
Beam Divergence	< 1.5 mrad				
Operating Temperature	18~25°C				

## Operating Modes (Cont.)

DMX Signal Levels

Channel 1		Channel 2	
Range 0-255	Patterns Selection	Range 0-255	Colors and Lines Selection
221-255	Automatically change all the patterns every 10 seconds	233-255	Automatically change all the colors and lines every 5 seconds
204-220	Sound Active Modes	209-232	Automatically change all the colors and lines every 3 seconds
200-203	Pattern50	196-208	Red + Green + Yellow, line2
:	:	183-195	Red + Green + Yellow, line1
		170-182	Red + Green + Yellow, dotted line
		157-169	Green + Yellow, line2
		144-156	Red + Yellow, line2
		131-143	Red + Green, line2
		118-130	Yellow, dotted line2
		105-117	Green, dotted line2
		92-104	Red, dotted line2
		79-91	Red + Green, line
		66-78	Yellow, dotted line1
		53-65	Green, dotted line1
		40-52	Red, dotted line1
12-15	Pattern3	27-39	Yellow, line
8-11	Pattern2	14-26	Green, line
4-7	Pattern1	1-13	Red, line
0-3	OFF	0	OFF

## Operating Modes (Cont.)

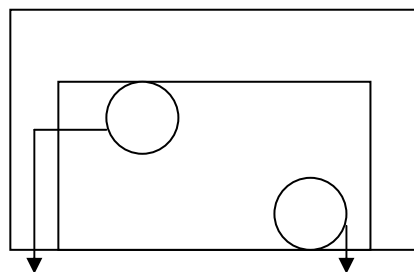
Channel 3		Channel 4	
Range 0-255		◎Channel 4 is functional only when the value of channel 3 is between 0-200	
Range 0-255	Mirror Position and Movement Selection	Range 0-255	Mirror Rotation Selection
228-255	Sound Active	255	 1440° 
216-227	Counter Clockwise rotation		 1080° 
213-215	Stop		 720° 
201-212	Clockwise rotation		 360° 
0-200	360° position changing		 0° 
			 360° 
			 720° 
			 1080° 
			 1440° 
		56	
		0-55	Not Used

## Trouble Shooting

- If there is no light from the unit, please check the main power supply and fuse.
- If unit does not respond to DMX, please check the DMX cables are connected properly and are wired correctly.
- If unit does not response to the music please check the sound-activation adjustment.
- If problems cannot be solved please contact your dealer for service
- You can adjust the position of green and red light by follow steps to make the best yellow light effect

Step1: Set the DIP Switch 12 to ON, others to OFF. (Adjust Mode)

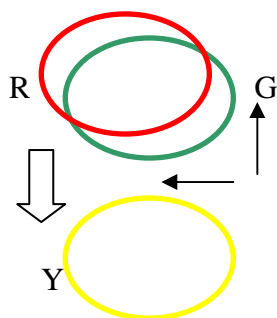
Step2: Open the cover at bottom. (Caution! Before you open the cover please project light on to the wall. Never look into beam directly)



Knob1: Control the green circle light horizontally.

Knob2: Control the green circle light vertically.

Step3: Control these 2 knobs to overlap the 2 circles



## Operating Modes

### 1. Stand-Alone Operation (Auto, Sound Active Mode)

Auto mode

- The unit runs built-in program to change the laser effects automatically. Set DIP switch pin 10 to ON, other pins to OFF to run Auto mode

Sound Active mode

- This unit has built-in program that will react to sound and music under Sound Active mode. Set all DIP switch pins to OFF to run Sound Active mode. Please adjust “Sensitivity Adjustment Knob” to fine-tune the optimum level of sound reaction.

## 2. Master-Slave Operation (Auto, Sound Active Mode)

This mode allows user to link up to 32 units to run the Master-Slave operation.

In the Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling unit. Daisy chain your units via the standard XLR microphone cables in the following configuration: 'Out' from the first unit to 'In' on the second, 'Out' from the second to 'In' on the third and so on.

Auto mode

- To set the master: Set DIP switch pin 10 and 11 to ON, other pins to OFF.
- To set the slaves: Set pin 1 to ON, other pins to OFF

Sound Active mode

- To set the master: Set DIP switch pin 11 to ON, other pins to OFF.
- To set the slaves: Set pin 1 to ON, other pins to OFF

### 3. DMX Operation

DMX operation gives the users freedom to create their own programs tailored to their own individual needs. To run this unit in DMX mode, connect the unit to any standard DMX controller via XLR connectors. Please consult DMX controller manual to determine address.

### Function Selection Chart

[illegible]

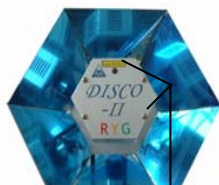
## Safety Label Position

Top Panel



Certification, identification and warning label

Front Panel



Laser aperture & aperture label

Left and Right Side Panel



Warning label

Bottom Panel



## Control Panel Introduction



- ① Adapter Connection
- ② Sensitivity Adjustment Knob
- ③ DIP Switch Pin
- ④ DMX In & Out
- ⑤ Power Switch

# Disco Laser II

## AL16 Series User Manual



*Your Best Mate  
in Laser Lighting!*

©2007 ACTOR-MATE CO., LTD.

No.15, Lane 83, Lungshou Street,  
Taoyuan City, Taiwan 330. R.O.C.

Tel:+886 3 3791326 / Fax:+886 3 3791919

www.actlaser.com.tw ✉ active@actlaser.com.tw